#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Group Art Unit: 2617

ANGUS O. DOUGHERTY ET AL.

Examiner: Inder P. Mehra

Serial No.: 09/505,271

Filed: February 16, 2000

For: CELLULARIZED PACKETIZED VOICE AND DATA

Attorney Docket No.: 1759 (USW 0573 PUS)

## APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents Commissioner for Patents U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief from the final rejection of claims 1-37, 43 and 47-55 of the Office Action mailed on June 15, 2007 for the above-identified patent application.

## I. REAL PARTY IN INTEREST

The real party in interest is Qwest Communications International Inc.

### II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences known to the Appellants, the Appellants' legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### III. STATUS OF CLAIMS

Claims 1-37 and 43-55 are pending. Claims 44-46 are allowed. Claims 1-37, 43 and 47-55 are rejected and are the subject of this appeal. Claims 38-42 are cancelled.

### IV. STATUS OF AMENDMENTS

None.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 provides a communication system including a plurality of subscriber units, Fig. 1 26, each subscriber unit sending and receiving information packets using a wireless communication link, Fig. 1 28, a plurality of access points, Fig. 1 22, each access point forming a coverage area for exchanging information packets with subscriber units within the coverage area through at least one wireless communication link, Fig. 1 24, and a plurality of distribution points, Fig. 1 40, each distribution point in communication with at least one access point, Fig. 1 44, and with at least one additional distribution point, Fig. 1 46, 48. Each distribution point is operative to receive an information packet for distribution to a destination within the communication system, Application, p. 12, Il. 4-7, to determine if the information packet destination is to one of the plurality of subscriber units within the coverage area of an

access point in communication with the distribution point, Application, p. 12, ll. 7-9, and to forward the information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point, Application p. 12, ll. 9-10. Each distribution point is also operative to forward the information packet to one of the additional distribution points in communication with the distribution point if the information packet destination is not to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point. Application, p. 12, ll. 10-14.

Claim 43 provides a communication system including a plurality of distribution points, Fig. 1 40, each distribution point in communication with at least one additional distribution point in the plurality of distribution points, Fig. 1 46, 48, and each distribution point operative to route information packets, Application, p. 12, ll. 4-27. The system also includes a plurality of subscriber units, Fig. 1 26, each subscriber unit operative to communicate information packets to a destination subscriber unit through at least one distribution point in the plurality of distribution points, Application, p. 8, ll. 19-22; p. 10, l. 23 - p. 12, l. 27. The system further includes a supervisor in communication with each distribution point, Fig. 1 56. The supervisor is operative to identify the distribution point with which each subscriber unit is communicating and to provide each distribution point with a listing of to which of the at least one additional distribution point in communication with the distribution point information packets should be forwarded for each possible destination distribution point, the listing based on maintaining a minimum quality of service in a path to the destination distribution point. Application, p. 13, l. 12 - p. 14, l. 2.

Claim 47 provides a distribution point for use in a communication system comprising a plurality of networked distribution points. The distribution point includes at least one front end communication interface, Fig. 2 100, each front end interface in communication

with an access point, Application, p. 15, ll. 5-7, the access point in wireless communication with subscriber units currently assigned to the distribution point, Fig. 1 26, 28. distribution point also includes at least one back end communication interfaces, Fig. 2 106, each back end interface in communication with a back haul communication device, Application, p. 15, ll. 18-21, at least one back haul communication device transferring packets with a back haul communication device in another of the plurality of networked distribution points, Application, p. 15, l. 21 - p. 16, l. 2. The distribution point further includes an intelligent packet switching device, Fig. 2 114. The intelligent packet switching device is operative to determine a destination for each received packet, Application, p. 16, ll. 3-11; p. 12, 11. 4-7, to determine if the destination is to a subscriber unit currently assigned to the distribution point, Application, p. 16, ll. 3-11; p. 12, ll. 7-9, and to send the packet to the subscriber unit if the subscriber unit is currently assigned to the distribution point, Application, p. 16, ll. 3-11; p. 12, ll. 9-10. The intelligent packet switching device is further operative to, if the destination is not to a subscriber unit currently assigned to the distribution point, determine if the destination is to a subscriber unit currently assigned to any other distribution point in the communication system, and if the subscriber unit is currently assigned to any other distribution point in the communication system, identify another distribution point in back haul communication with the distribution point to which the packet should be forwarded and forward the packet to the identified distribution point. Application, p. 16, ll. 3-11; p. 12, ll. 10-14.

### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-11, 14-15, 21 and 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,898,904 (Wang) in view of U.S. Pat. No. 5,475,732 (Pester). Claims 12-13, 16-20 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pester in further view of U.S. Pat. No. 6,577,643 (Rai). Claims 22-26 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang

in view of Pester in further view of U.S. Pat. No. 6,795,863 (Doty). Claims 30, 32 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pester in further view of U.S. Pat. No. 6,141,565 (Feuerstein). Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pester in further view of U.S. Pat. No. 6,738,637 (Marinho). Claims 36, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pester in further view of U.S. Pat. No. 6,757,268 (Zendle). Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pester in further view of U.S. Pat. No. 5,640,414 (Blakeney).

## VII. ARGUMENT

# A. Claims 1-11, 14-15, 21 And 47-51 Are Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester

### Wang And Pester Do Not Disclose Each And Every Element Of Claim 1

With regard to claim 1, Pester does not teach a plurality of access points, each access point forming a coverage area for exchanging information packets with subscriber units within the coverage area through at least one wireless communication link. Examiner attempts to find this limitation in SP's 14, 16, 20 and 255-201-103 of Pester. Office Action, June 15, 2007, pp. 2-3. SP's 14, 16, 20 and 255-201-103, however, do not form a coverage area for exchanging information packets with subscriber units within the coverage area through at least one wireless communication link. Instead, Pester states that

The broken lines connecting the SPs together may be analog trunks or voice or similar circuits. The SPs in a given region are connected together by local trunks 22, 24, 26 in the left region and 28, 30, 32 in the right region.

Pester, col. 4, 11. 2-5.

Pester's "analog trunks or voice or similar circuits" are not wireless communication links. As such, SP's 14, 16, 20 and 255-201-103 cannot form coverage areas.

With regard to claim 1, Wang does not teach each distribution point operative to forward the information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point. Examiner attempts to find this limitation in "Wang's numerous base stations" and columns 10 and 11 of Wang. Office Action, June 15, 2007, pp. 3-4. Wang's "[b]ase station 1003," however, "transmits the message received from pager 1005 to network control center 1009," col. 8, 11. 61-62. Wang's network control center 1009 is not the claimed access point. Wang's base station 1003, therefore, cannot forward an information packet to the access point defining the coverage area containing the subscriber unit as claimed. Moreover, Wang cannot forward the information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point as Examiner admits that Wang does not teach determining if the information packet destination is to one of the plurality of subscriber units within the coverage area of an access point in communication with the distribution point, Office Action, June 15, 2007, p. 4.

Pester, likewise, does not teach each distribution point operative to forward the information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point. Examiner attempts to find this limitation in Figure 1 and column 3 of Pester. Office Action, June 15, 2007, pp. 3-4. As explained above, however, Pester's SP's 14, 16, 20 and 255-201-103 are not the claimed access points. Pester's SP's 38 and 40, therefore, cannot forward an information packet to the access point defining the coverage area containing the subscriber unit

as claimed. Moreover, SP's 38 and 40 communicate via ICN trunk 34. Figure 1, Pester. Pester states that

The broken lines connecting the SPs together may be analog trunks or voice or similar circuits.

Pester, col. 4, 11. 2-3.

Pester's "analog trunks or voice or similar circuits" do not appear to carry information packets.

With regard to claim 1, Wang does not teach each distribution point operative to forward the information packet to one of the additional distribution points in communication with the distribution point if the information packet destination is not to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point. Examiner attempts to find this limitation in "Wang's numerous base stations" and columns 5-6, 10 and 14 of Wang. Office Action, June 15, 2007, pp. 3-4. Wang's "base station 1003," however, "transmits [a] message . . . to . . . subscriber 1005A," col. 8, 11. 54-56, and "[b]ase station 1003 transmits the message received from pager 1005 to network control center 1009," col. 8, ll. 61-62. Wang's subscriber 1005A and network control center 1009 are not the claimed additional distribution points. Wang's base station 1003, therefore, cannot forward the information packet to one of the additional distribution points as claimed. Moreover, Wang cannot forward the information packet to one of the additional distribution points in communication with the distribution point if the information packet destination is not to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point as Examiner admits that Wang does not teach determining if the information packet destination is to one of the plurality of subscriber units within the coverage area of an access point in communication with the distribution point, Office Action, June 15, 2007, p. 4.

Pester, likewise, does not teach each distribution point operative to forward the information packet to one of the additional distribution points in communication with the distribution point if the information packet destination is not to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point. As explained above, Pester's "analog trunks or voice or similar circuits" utilized by SP's 38 and 40 do not appear to carry information packets.

With regard to claim 1, Pester does not teach each subscriber unit sending and receiving information packets using a wireless communication link. Examiner asserts that this limitation may be found in "Pester's links 24, 26, 28 and 32 in fig. 1." Office Action, June 15, p. 2. As explained above, however, Pester's "analog trunks or voice or similar circuits" are not wireless communication links.

#### Examiner Does Not Establish A *Prima Facie* Case Of Obviousness For Claim 1

Examiner provides a brief explanation as to why one of ordinary skill would have had reason to modify the teachings of Wang with Pester:

It would have been obvious . . . to use the capability of determine if the information packet destination is to a subscriber unit within the coverage area of an access point in communication with the distribution point by Pester This capability can be combined with the distribution point, as taught by Pester. The suggestion/motivation to do so would have been to provide convenience of access by users.

Office Action, January 9, 2007, pp. 4-5, (emphasis added).

Applicants' Attorney submits that Examiner has not carried the burden in establishing a *prima* facie case of obviousness. For example, Examiner's rationale suggests that Wang's base stations can be modified to determine if the information packet destination is to one of the

plurality of subscriber units within the coverage area of an access point in communication with the distribution point. Wang, however, teaches away from such functionality for its base stations. As explained above, Wang's "base station 1003 transmits [a] message . . . to . . . subscriber 1005A," col. 8, ll. 54-56, and "[b]ase station 1003 transmits the message received from pager 1005 to network control center 1009," col. 8, ll. 61-62. Wang's "network control center 1009 sends a message to subscriber 1006A's paging service 1017, notifying subscriber 1006A that he has a message from subscriber 1005A at network control center 1009 [and] when the message is received by paging service 1017, the message is sent to transmitter 1025 . . . and transmitted to pager 1006." Col. 9, ll. 9-18. Examiner's suggestion to modify Wang with Pester is not technically feasible as such modification implicates the operation of Wang's network control center and paging services and renders Wang inoperable for its intended purpose.

Assuming, *arguendo*, that Wang's base stations could be modified to determine if the information packet destination is to one of the plurality of subscriber units within the coverage area of an access point in communication with the distribution point, a user would be unaware that such functionality resides with the base stations and therefore the statement "provide convenience of access by users" does not make sense from a technical standpoint. Examiner, thus, does not provide any reason to combine the references.

#### Examiner states that

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Peaster discloses plurality of access points, distribution points and subscriber units for communication in their respective coverage areas and across distribution network including different coverage areas. Wang discloses Base Station (access points) and NCC (distribution points) for communication with wireless terminals (subscriber units).

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) the court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132). Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed . . . . " In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004), see MPEP 2123.

# In light of above explanation, arguments by applicant are not persuasive.

Office Action, June 15, 2007, pp. 20-21, (emphasis in original).

Examiner's statements appear to be a recitation of case law, assertions about what Pester and Wang disclose and a conclusory statement that "arguments by applicant are not persuasive." Examiner has not carried his burden in establishing a *prima facie* case of obviousness. Examiner has not provided any explanation as to why one of ordinary skill would have combined the teachings of Pester with Wang and that it is indeed possible to do so.

Claims 2-11, 14-15 and 21 depend from claim 1. For the reasons claim 1 is patentable, claims 2-11, 14-15 and 21 are patentable.

For the reasons claim 1 is patentable, claim 47 is patentable.

Claims 48-51 depend from claim 47. For the reasons claim 47 is patentable, claims 48-51 are patentable.

# B. Claims 12-13, 16-20 And 27-29 Are Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester In Further View Of Rai

Claims 12-13, 16-20 and 27-29 depend from claim 1. For the reasons claim 1 is patentable, claims 12-13, 16-20 and 27-29 are patentable.

# C. Claims 22-26 And 52-55 Are Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester In Further View Of Doty

Claims 22-26 depend from claim 1. For the reasons claim 1 is patentable, claims 22-26 are patentable.

Claims 52-55 depend from claim 47. For the reasons claim 47 is patentable, claims 52-55 are patentable.

## D. Claims 30, 32 And 34-35 Are Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester In Further View Of Feuerstein

Claims 30, 32 and 34-35 depend from claim 1. For the reasons claim 1 is patentable, claims 30, 32 and 34-35 are patentable.

## E. Claims 31 And 33 Are Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester In Further View Of Marinho

Claims 31 and 33 depend from claim 1. For the reasons claim 1 is patentable, claims 31 and 33 are patentable.

## F. Claims 36, 37 And 41 Are Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester In Further View Of Zendle

Claims 36, 37 and 41 depend from claim 1. For the reasons claim 1 is patentable, claims 36, 37 and 41 are patentable.

# G. Claim 43 Is Patentable Under 35 U.S.C. 103(a) Over Wang In View Of Pester In Further View Of Blakeney

### Wang, Pester and Blakeney Do Not Disclose Each And Every Claimed Element

Although claim 43 and claim 1 differ in scope, to the extent Examiner asserts that "Wang discloses all the limitations of the subject matter, as in claim 1," for the reasons claim 1 is patentable, claim 43 is patentable.

Wang, Pester and Blakeney do not teach the listing based on maintaining a minimum quality of service in a path to the destination distribution point. Examiner does not cite any teachings regarding this limitation.

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Examiner Does Not Establish A Prima Facie Case Of Obviousness

Examiner states that

It would have been obvious to a person of ordinary skill . . . to use the capability of "determining any packets that are to be transmitted", and "queuing packets within non selected subscriber units for later transmission, as taught by Tran and Jones. The suggestion/motivation to do so would have been to

optimize the resources to facilitate high priority transmission.

Office Action, June 15, 2007, p. 14.

Examiner, however, does not provide any reason to combine the references as Examiner's

explanation is directed to limitations, e.g., "queuing packets within non selected subscriber

units for later transmission," not found in claim 43 and art, e.g., "Tran and Jones," not cited

against claim 43.

Respectfully submitted,

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Enclosure - Appendices

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#### VIII. CLAIMS APPENDIX

- 1. A communication system comprising:
- a plurality of subscriber units, each subscriber unit sending and receiving information packets using a wireless communication link;
- a plurality of access points, each access point forming a coverage area for exchanging information packets with subscriber units within the coverage area through at least one wireless communication link; and
- a plurality of distribution points, each distribution point in communication with at least one access point and with at least one additional distribution point, each distribution point operative to
  - (a) receive an information packet for distribution to a destination within the communication system,
  - (b) determine if the information packet destination is to one of the plurality of subscriber units within the coverage area of an access point in communication with the distribution point,
  - (c) forward the information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point, and
  - (d) forward the information packet to one of the additional distribution points in communication with the distribution point if the information

packet destination is not to one of the plurality of subscriber units within the coverage area of the access point in communication with the distribution point.

- 2. The communication system of claim 1 wherein each information packet includes at least one of voice, video, and data information.
- 3. The communication system of claim 1 wherein at least one information packet comprises voice information.
- 4. The communication system of claim 1 wherein at least one information packet comprises video information.
- 5. The communication system of claim 1 wherein at least one information packet comprises data.
- 6. The communication system of claim 1 wherein at least one information packet comprises streaming audio.
- 7. The communication system of claim 1 wherein at least one information packet comprises streaming video.
- 8. The communication system of claim 1 wherein the communication link is a symmetric link.
- 9. The communication system of claim 1 wherein the communication link is an asymmetric link.
- 10. The communication system of claim 1 wherein each distribution point is in wireless communication with at least one of the at least one access point.

- 11. The communication system of claim 1 wherein at least one distribution point is in wireline communication with at least one of the at least one access point.
- 12. The communication system of claim 1 wherein at least one of the at least one access point is packaged with a distribution point.
- 13. The communication system of claim 1 wherein at least one of the plurality of access points is not collocated with any distribution point.
- 14. The communication system of claim 1 wherein at least one of the plurality of distribution points is in wireless communication with at least one additional distribution point of the plurality of distribution points.
- 15. The communication system of claim 1 wherein the plurality of distribution points forms a wireless network of distribution points.
- 16. The communication system of claim 1 further comprising a communication system interface device operative to format information contained in the information packet to pass through a second communication system, the distribution point further operative to receive an information packet for distribution within the second communication system and to send the information packet to the communication system interface device.
- 17. The communication system of claim 16 wherein the second communication system comprises a wireless telecommunication system.
- 18. The communication system of claim 16 wherein the second communication system comprises a wireline telecommunication system.

- 19. The communication system of claim 16 wherein the second communication system comprises a data network.
- 20. The communication system of claim 16 wherein the second communication system comprises a video distribution system.
- 21. The communication system of claim 1 further comprising a telecommunication system interface device operative to format information contained in the information packet to pass through a telecommunication system, the distribution point further operative to:

receive at least one information packet from the telecommunication system interface device;

determine if the at least one information packet destination is to a subscriber unit within the coverage area of an access point in communication with the distribution point;

forward the at least one information packet to the access point defining the coverage area containing the subscriber unit if the information packet destination is to a subscriber unit within the coverage area of the access point in communication with the distribution point; and

forward the at least one information packet to one of the additional distribution points in communication with the distribution point if the information packet destination is not to a subscriber unit within the coverage area of the access point in communication with the distribution point.

- 22. The communication system of claim 1 wherein at least one distribution point in the plurality of distribution points is further in communication with an Internet gateway, the distribution point further operative to exchange packets with the Internet gateway.
- 23. The communication system of claim 1 wherein at least one distribution point in the plurality of distribution points comprises an asynchronous transfer mode switch.
- 24. The communication system of claim 1 wherein at least one distribution point in the plurality of distribution points comprises an Internet protocol router.
- 25. The communication system of claim 1 wherein at least one distribution point in the plurality of distribution points comprises an Ethernet router.
- 26. The communication system of claim 1 wherein at least one distribution point in the plurality of distribution points comprises a TDM switch.
- 27. The communication system of claim 1 wherein each subscriber unit of the plurality of subscriber units is autonomously registered when the subscriber unit first enters the coverage area of a radio access point within the communication system.
- 28. The communication system of claim 27 wherein each subscriber unit of the plurality of subscriber units maintains registration as the subscriber unit moves from one coverage area into another coverage area.
- 29. The communication system of claim 27 wherein each subscriber unit of the plurality of subscriber units is autonomously deregistered when the subscriber unit leaves the communication system.

- 30. The communication system of claim 1 wherein a quality error bit rate is established for each subscriber unit based on the location of the subscriber unit within the communication system.
- 31. The communication system of claim 1 wherein a quality error bit rate is established for each subscriber unit based on a class of service.
- 32. The communication system of claim 1 wherein a quality error bit rate is established for each subscriber unit based on a grade of service.
- 33. The communication system of claim 1 wherein a quality error bit rate is established for each subscriber unit based on a rate of service.
- 34. The communication system of claim 1 wherein the subscriber unit is a fixed device.
- 35. The communication system of claim 1 wherein the subscriber unit is a non-fixed device.
- 36. The communication system of claim 1 wherein the distribution point dynamically allocates bandwidth when the information packet is forwarded to one of the additional distribution points in communication with the distribution point.
- 37. The communication system of claim 1 wherein bandwidth is dynamically allocated when an information packet is exchanged between one of the plurality of subscriber units and one of the plurality of access points.
  - 43. A communication system comprising:

a plurality of distribution points, each distribution point in communication with at least one additional distribution point in the plurality of distribution points, each distribution point operative to rout information packets;

a plurality of subscriber units, each subscriber unit operative to communicate information packets to a destination subscriber unit through at least one distribution point in the plurality of distribution points; and

a supervisor in communication with each distribution point, the supervisor operative to identify the distribution point with which each subscriber unit is communicating and to provide each distribution point with a listing of to which of the at least one additional distribution point in communication with the distribution point information packets should be forwarded for each possible destination distribution point, the listing based on maintaining a minimum quality of service in a path to the destination distribution point.

47. A distribution point for use in a communication system comprising a plurality of networked distribution points, the distribution point comprising:

at least one front end communication interface, each front end interface in communication with an access point, the access point in wireless communication with subscriber units currently assigned to the distribution point;

at least one back end communication interfaces, each back end interface in communication with a back haul communication device, at least one back haul communication device transferring packets with a back haul communication device in another of the plurality of networked distribution points; and

an intelligent packet switching device operative to

- (a) determine a destination for each received packet,
- (b) determine if the destination is to a subscriber unit currently assigned to the distribution point,
- (c) send the packet to the subscriber unit if the subscriber unit is currently assigned to the distribution point,
- (d) if the destination is not to a subscriber unit currently assigned to the distribution point, determine if the destination is to a subscriber unit currently assigned to any other distribution point in the communication system, and
- (e) if the subscriber unit is currently assigned to any other distribution point in the communication system, identify another distribution point in back haul communication with the distribution point to which the packet should be forwarded and forward the packet to the identified distribution point.
- 48. The distribution point as in claim 47 wherein at least one front end communication interface is connected to an antenna, thereby permitting the distribution point to be in wireless communication with at least one radio access point.
- 49. The distribution point as in claim 47 wherein at least one front end communication interface is in wireline connection with a radio access point.

- 50. The distribution point as in claim 47 wherein transferring packets between a back haul communication device within the distribution point and a back haul communication device in another of the plurality of networked distribution points is a wireless transfer.
- 51. The distribution point as in claim 47 wherein transferring packets between a back haul communication device within the distribution point and a back haul communication device in another of the plurality of networked distribution points is through a wireline connection.
- 52. The distribution point as in claim 47 wherein the intelligent packet switching device comprises an asynchronous transfer mode switch.
- 53. The distribution point as in claim 47 wherein the intelligent packet switching device comprises an Internet protocol router.
- 54. The distribution point as in claim 47 wherein the intelligent packet switching device comprises an Ethernet router.
- 55. The distribution point as in claim 47 wherein the intelligent packet switching device comprises a TDM switch.

## IX. EVIDENCE APPENDIX

None.

## X. RELATED PROCEEDINGS APPENDIX

None.